

IN THE CLAIMS

1. (Original) A method of providing service announcement information, comprising:

transmitting a service on a first channel; and

transmitting pointer data on the first channel, wherein the pointer data identifies a second channel on which a service announcement identifying the service transmitted on the first channel is located.

2. (Original) The method of claim 1, wherein the first channel and the second channel are frequencies.

3. (Original) The method of claim 2, wherein the pointer data includes the frequency of the second channel.

4. (Original) The method of claim 2, wherein the service announcement further identifies the frequency of the channel corresponding to the service.

5. (Original) The method of claim 1, wherein the transmitting steps are performed in accordance with at least one of the following protocols: DVB, DAB, GSM, GPRS, UMTS, WLAN, and Bluetooth.

6. (Original) A method of providing service announcement information, comprising:

transmitting a service on each of a plurality of channels; and

transmitting pointer data on each of the plurality of channels, wherein the pointer data identifies a channel containing a plurality of service announcements identifying the services transmitted on each of the plurality of channels.

7. (Original) The method of claim 6, wherein each of the plurality of channels includes the channel containing the service announcements.

8. (Original) The method of claim 6, wherein the channel identified by the pointer data is a frequency.

9. (Original) The method of claim 6, wherein the transmitting steps are performed in accordance with at least one of the following protocols: DVB, DAB, GSM, GPRS, UMTS, WLAN, and Bluetooth.

10. (Original) The method of claim 6, wherein the pointer data includes information sufficient to permit a mobile terminal to access the service announcements.

11. (Original) The method of claim 10, wherein the information includes at least one of the following: a frequency, a PID, a MAC, a bandwidth, an fft, a constellation, a code rate, a guard interval, a hierarchy and a hierarchical priority.

12. (Original) A method of providing service announcement information, comprising:

transmitting a service using a first protocol together with first pointer data on each of a first plurality of channels, the first pointer data identifying a first channel containing a plurality of service announcements identifying the services transmitted on each of the first plurality of channels; and

transmitting a service using a second protocol together with second pointer data on each of a second plurality of channels, the second pointer data identifying a second channel containing a plurality of service announcements identifying the services transmitted on each of the second plurality of channels.

13. (Original) The method of claim 12, wherein the first protocol and the second protocol are DVB and DAB respectively.

14. (Original) A method of providing a service announcement, comprising:
transmitting a service using a first protocol on each of a first plurality of channels;
transmitting pointer data on each of the first plurality of channels;
transmitting a service using a second protocol on each of a second plurality of channels; and

transmitting pointer data on each of the second plurality of channels, wherein the pointer data identifies a channel containing a plurality of service announcements identifying the services transmitted on the first plurality of channels and on the second plurality of channels.

15. (Original) A method of accessing a communication channel from a plurality of communication channels within a network with a mobile terminal capable of receiving at least one signal from at least one of the communications channels within the network, the method comprising:

identifying at least one communication channel that is transmitting signals receivable by the mobile terminal;

accessing a first communication channel that is transmitting at least one signal receivable by the mobile terminal;

receiving first signals from the first communications channel;

searching in the first signals for redirection information;

selecting and accessing a second communication channel from the plurality of communication channels based on the redirection information, if the redirection information is received within a first period of time; and

selecting and accessing a third communication channel if the redirection information is not received within the first period of time.

16. (Original) The method of claim 15, wherein the at least one service announcement for at least one communication channel transmits over the second communication channel.

17. (Original) The method of claim 16, wherein at least one service is transmits over the second communication channel further transmits at least one service.

a1 18. (Original) The method of claim 15, wherein the mobile terminal selects the second communication channel if the redirection information is received within the first period of time, and the mobile terminal is in a selectable mode.

19. (Original) The method of claim 15, wherein the mobile terminal selects the second communication channel if the redirection information is received within the first period of time, wherein the first period of time directly follows initializing the mobile terminal.

20. (Original) The method of claim 15, wherein the first period of time is determined by a number of the plurality of communication channels.

21. (Original) The method of claim 15, wherein the third communication channel is selected randomly from the plurality of communication channels.

22. (Original) The method of claim 15, wherein the redirection information is transmitted at a first interval on at least one communication channel.

23. (Original) The method of claim 22, wherein the first interval on at least one communication channel does not equal a second interval on at least one other communication channel from the plurality of communication channels, wherein the redirection information is transmitted at the second interval.

24. (Original) The method of claim 15, wherein at least one communication channel is a specific frequency.

25. (Original) The method of claim 15, wherein the first communication channel is the second communication channel.

26. (Original) The method of claim 15, wherein at least one service transmits over the first communication channel.

a | 27. (Original) A method of accessing a communications frequency from a plurality of communications frequencies within a network with a mobile terminal capable of receiving at least one signal from at least one of the communications frequencies within the network, the method comprising:

identifying at least one communication frequency that is transmitting signals receivable by the mobile terminal;

accessing a first communication frequency that is transmitting at least one signal receivable by the mobile terminal;

receiving first signals from the first communications frequency;

searching in the first signals for redirection information;

selecting and accessing a second communication frequency from the plurality of communication channels based on redirection information, if the redirection information is received within a first period of time; and

selecting and accessing a third communication frequency if the redirection information is not received within the first period of time.

28. (Original) The method of claim 27, wherein the at least one service announcement for at least one communication frequency transmits over the second communication frequency.

29. (Original) The method of claim 28, wherein at least one service is transmits over the second communication frequency further transmits at least one service.

30. (Original) The method of claim 27, wherein the mobile terminal selects the second communication frequency if the redirection information is received within the first period of time, and the mobile terminal is in a selectable mode.

91 31. (Original) The method of claim 27, wherein the mobile terminal selects the second communication frequency if the redirection information is received within the first period of time, wherein the first period of time directly follows initializing the mobile terminal.

32. (Original) The method of claim 27, wherein the first period of time is determined by a number of the plurality of communication channels.

33. (Original) The method of claim 27, wherein the third communication frequency is selected randomly from the plurality of communication frequencies.

34. (Original) The method of claim 27, wherein the redirection information is transmitted at a first interval on at least one communication frequency.

35. (Original) The method of claim 34, wherein the first interval on at least one communication frequency does not equal a second interval on at least one other communication frequency from the plurality of communication frequency, wherein the redirection information is transmitted at the second interval.

36. (Original) The method of claim 27, wherein the first communication frequency is the second communication frequency.

37. (Original) The method of claim 27, wherein at least one service transmits over the first communication channel.

38. (Original) A mobile terminal having at least two receivers enabling the mobile terminal to receive service announcement information of different protocols, comprising:

means for receiving a service on a first channel; and

means for receiving pointer data on the first channel, wherein the pointer data identifies a second channel on which a service announcement identifying the service received on the first channel is located.

a1 39. (Original) The mobile terminal of claim 38, wherein the pointer data includes information that permits the mobile terminal to access the service announcement.

40. (Original) The mobile terminal of claim 39, wherein the information includes at least one of the following: a frequency, a PID, a MAC, a bandwidth, an fft, a constellation, a code rate, a guard interval, a hierarchy and a hierarchical priority.

41. (Original) The mobile terminal of claim 40, wherein the service announcement is linked to the frequency.

42. (Original) The mobile terminal of claim 40, wherein the information tunes the mobile terminal to the second channel.

43. (Original) An article of manufacture, comprising:

a computer readable medium including instructions for:

transmitting a service on a first channel; and

transmitting pointer data on the first channel, wherein the pointer data identifies a second channel on which a service announcement identifying the service transmitted on the first channel is located.

44. (Original) An article of manufacture, comprising:
a computer readable medium including instructions for:
transmitting a service on each of a plurality of channels; and
transmitting pointer data on each of the plurality of channels, wherein the pointer data identifies a channel containing a plurality of service announcements identifying the services transmitted on each of the plurality of channels.

45. (Original) An article of manufacture, comprising:
a computer readable medium including instructions for:
transmitting a service using a first protocol together with first pointer data on each of a first plurality of channels, the first pointer data identifying a first channel containing a plurality of service announcements identifying the services transmitted on each of the first plurality of channels; and

transmitting a service using a second protocol together with second pointer data on each of a second plurality of channels, the second pointer data identifying a second channel containing a plurality of service announcements identifying the services transmitted on each of the second plurality of channels.

46. (Original) An article of manufacture, comprising:
a computer readable medium including instructions for:
transmitting a service using a first protocol on each of a first plurality of channels;
transmitting pointer data on each of the first plurality of channels;
transmitting a service using a second protocol on each of a second plurality of channels; and

transmitting pointer data on each of the second plurality of channels, wherein the pointer data identifies a channel containing a plurality of service announcements identifying the services transmitted on the first plurality of channels and on the second plurality of channels.

47. (Original) An article of manufacture, comprising:

a computer readable medium including instructions for:

identifying at least one communication channel that is transmitting signals receivable by the mobile terminal;

a1 accessing a first communication channel that is transmitting at least one signal receivable by the mobile terminal;

receiving first signals from the first communications channel;

searching in the first signals for redirection information;

selecting and accessing a second communication channel from the plurality of communication channels based on the redirection information, if the redirection information is received within a first period of time; and

selecting and accessing a third communication channel if the redirection information is not received within the first period of time.

48. (Original) An article of manufacture, comprising:

a computer readable medium including instructions for:

identifying at least one communication frequency that is transmitting signals receivable by the mobile terminal;

accessing a first communication frequency that is transmitting at least one signal receivable by the mobile terminal;

receiving first signals from the first communications frequency;

searching in the first signals for redirection information;

selecting and accessing a second communication frequency from the plurality of communication channels based on redirection information, if the redirection information is received within a first period of time; and

selecting and accessing a third communication frequency if the redirection information is not received within the first period of time.

Please add the following new claims:

41 49. (New) The method of claim 15, wherein the first period of time is specified by a user of the mobile terminal.

50. (New) The method of claim 15, wherein the first time period is established in the mobile terminal at a time of manufacture.

15. (Bender 7/128; 1/13 & 7/135; 1/11 & 7/130) As a preliminary matter, Applicant respectfully submits that it is not discernable from the Office Action what exactly in Bender the Office Action contends corresponds to the first, second and third communication channels recited in claim 15. Clarification is respectfully requested.

The passages of Bender cited in the Office Action against the subject matter of claim 15 disclose tuning to the control channel, synchronizing to the control channel cycle (CCC) and, in the synchronous capsule (SC) portion of the cycle, 1) if Access Terminal (AT)-Directed packets in the sleep state synchronous capsule (SSSC) of the SC indicate that overhead parameters are up to date, then entering a sleep state; and 2) if AT-Directed packets indicate that the overhead parameters are not up to date, then keeping the power on to read overhead parameters from the remainder of the SC.

Applicant respectfully submits that this does not disclose at least claim 15's features of "selecting and accessing a second communication channel from the plurality of communication channels based on the redirection information, if the redirection information is received within a first period of time; and selecting and accessing a third communication channel if the redirection information is not received within the first period of time". First, the AT-packets are not redirection information of the instant application, rather, these packets simply indicate whether overhead information is up to date. Second, there is no "selecting" of the sleep state synchronous capsule (SSSC) of the synchronous capsule (SC), let alone doing so based on redirection information; rather, in Bender, the mobile station always reads this portion of the synchronous capsule whenever it is tuned to the control channel and synchronized with the control channel cycle.

Accordingly, Applicant respectfully submits that claim 15 is not anticipated by Bender. Claim 47 contains elements similar to those found in claim 15, and thus, is allowable for at least the same reasons.

Claim 27 is similar to claim 15, except that it requires first, second and third communication frequencies. In contrast, Bender merely discloses a single control channel frequency with time multiplexed slots of information. Accordingly, Applicant respectfully submits that claim 27 is not anticipated by Bender. Claim 48 contains elements similar to those found in claim 27, and thus, is allowable for at least the same reasons.

Claim 43 is directed to an "article of manufacture, comprising: a computer readable medium including instructions for: transmitting a service on a first channel; and transmitting pointer data on the first channel, wherein the pointer data identifies a second channel on which a service announcement identifying the service transmitted on the first channel is located."

The Office Action cites claim 21 of Bender as disclosing each and every element of claims 43 and 44. Claim 21 of Bender reads as follows:

"A computer readable medium embodying a method for monitoring a control channel in a telecommunication system, said method comprising: receiving a packet directed to an access terminal during a first time period; receiving a message during said first time period; and monitoring said control channel to receive a set of overhead parameters based on a relationship between said message and a previous message."

It is clear on its face that claim 21 of Bender does not teach each and every element of claim 43. In particular, claim 21 mentions neither "transmitting a service on a first channel", nor "transmitting pointer data on the first channel", nor "wherein the pointer data identifies a second

channel on which a service announcement identifying the service transmitted on the first channel is located”. Accordingly, Applicant respectfully submits that claim 43 is not anticipated by Bender.

Claim 44 is similar to claim 43. It requires, however, “transmitting a service on each of a plurality of channels; and transmitting pointer data on each of the plurality of channels, wherein the pointer data identifies a channel containing a plurality of service announcements identifying the services transmitted on each of the plurality of channels.” None of these claimed features is disclosed by claim 21 of Bender. Accordingly, claim 44 is not anticipated by Bender.

The Office Action cites claims 21-23 of Bender and the disclosure at 7/134 of Bender as disclosing each and every element of claims 45 and 46. Applicant has reviewed the cited passages of Bender. These disclose a mobile terminal monitoring a synchronous capsule of a control channel to determine whether it has the most updated set of overhead parameters. If it has the most up to date set, the mobile terminal enters a sleep mode. If it does not have the most up to date set, the mobile terminal will continue to monitor subsequent cycles of the synchronous capsule until an up to date set of parameters is received. Applicant respectfully submits that this has nothing to do with the subject matter of claims 45 and 46. For example, claim 45 requires:

“transmitting a service using a first protocol together with first pointer data on each of a first plurality of channels, the first pointer data identifying a first channel containing a plurality of service announcements identifying the services transmitted on each of the first plurality of channels; and

transmitting a service using a second protocol together with second pointer data on each of a second plurality of channels, the second pointer data identifying a second channel containing a plurality of service announcements identifying the services transmitted on each of the second plurality of channels.”

These features of claim 45 are neither taught nor suggested by the cited passages of Bender.

Similarly, claim 46 requires:

“transmitting a service using a first protocol on each of a first plurality of channels;

transmitting pointer data on each of the first plurality of channels;

transmitting a service using a second protocol on each of a second plurality of channels; and

transmitting pointer data on each of the second plurality of channels, wherein the pointer data identifies a channel containing a plurality of service announcements identifying the services transmitted on the first plurality of channels and on the second plurality of channels.”

These features of claim 46 are likewise neither taught nor suggested by the cited passages of Bender.

Accordingly, Applicant respectfully submits that claims 45 and 46 are not anticipated by Bender.

Also in the Office Action, claim 38 is rejected as being anticipated by Bender. (See Office Action, p. 4-5) However, the Office Action admits that Bender does not disclose various features of claim 38. Applicant respectfully submits that this is an improper rejection under 35 U.S.C. §102(e), and thus, respectfully requests that the rejection be withdrawn. Moreover, claim 38 is the means-plus-function counterpart of method claim 1 and is allowable for at least the same reasons set forth below in urging the allowance of claim 1.

Rejections Under 35 U.S.C. §103:

Claims 21 and 23 were rejected under 35 U.S.C. §103 as being unpatentable over Bender in view of the “admitted prior art”. Claims 1-4, 6-8, 10-12, 14, 26, 28, 29, 40 and 41 were rejected under 35 U.S.C. §103 as being unpatentable over Bender in view of U.S. Publication No. 2003/0003909 to Keronen et al. (“Keronen”). Claims 1, 6, 12 and 14 are independent.

With respect to the rejections of claims 21 and 23 (§5 of the Office Action), Applicant respectfully submits that the Office Action is incomplete in that it makes reference to “admitted prior art” but fails to identify the page of the instant application on which the admitted prior art being referred to can be found. Also, the Office Action refers to a “combination of Bender Wright”, but there is no “Wright” reference of record. Applicant respectfully requests clarification of the foregoing rejection.

Claim 1 was rejected as being unpatentable over Bender in view of Keronen. Claim 1 recites:

"A method of providing service announcement information, comprising:

transmitting a service on a first channel; and

transmitting pointer data on the first channel, wherein the pointer data identifies a second channel on which a service announcement identifying the service transmitted on the first channel is located."

As a preliminary matter, Applicant respectfully submits that the rejection of claim 1 on page 8, line 8, includes missing text, which, together with the overall wording of the rejection, makes the bases for the rejection indiscernible. For example, the rejection mentions “send the” without specifying what is being sent. Also, in the same sentence, the Office Action refers to page 6, section 128 of Bender. However, Bender does not include a section 128 on page 6. Is the Office

Action referring to section 128 on page 7 or some other section on page 6? At the very least, it is indiscernible what the Office Action contends in Bender corresponds to "a first channel", "pointer data on the first channel [that] identifies a second channel", and "the second channel". Nor is it discernable from the Office Action what in the second channel of Bender identifies what in the first channel (e.g., in claim 1, a "service announcement" in the second channel identifies the "service" transmitted on the first channel). Clarification of the bases for this rejection is respectfully requested.

The Office Action appears to take the position that Bender teaches a broadcast channel that allegedly corresponds to the claimed first channel and a control channel that allegedly corresponds to the claimed second channel. (p. 4, section 62; p. 6, section 128) However, the cited passages of Bender do not teach a broadcast channel and a control channel; rather, these passages simply provide that "the Overhead Message Protocol ... may broadcast essential parameters over the control channel." (4/62) Also, claim 1 requires "pointer data on the first channel ... identify[ing] a second channel" and a "service announcement [on the second channel] identifying the service transmitted on the first channel". With respect to these claim elements, however, information in the overhead slot of the SC in Bender does not identify the AT-Directed Packets slot of the SSSC nor does information in the AT-Directed Packets slot identify the overhead parameters slot.

For at least these reasons, a prima facie case of obviousness has not been established.

The Office Action further states that "Bender fails to teach that the broadcast information are service providers and the second channel information are the selected service provider by the user", but that these features are found in Keronen.

First, Applicant respectfully submits that this mischaracterizes what is being claimed by Applicant; rather than the foregoing, claim 1 calls for “transmitting a service on a first channel; and transmitting pointer data on the first channel, wherein the pointer data identifies a second channel on which a service announcement identifying the service transmitted on the first channel is located.”

Second, for the reasons discussed above, these features of claim 1 are clearly neither taught nor suggested by Bender. Likewise, Keronen fails to teach or suggest these features. In particular, Keronen discloses a mobile network broadcasting information about local service providers to a mobile station; the mobile station transmitting an information request to a server via the mobile network; and, in response to the request, the server transmitting service information to the mobile station via the mobile network. Applicant has reviewed the passages of Keronen cited in the Office Action (i.e., abstract and page 3, section 24) and respectfully submits that these do not disclose at least “transmitting a service on a first channel” and “a second channel on which a service announcement identifying the service transmitted on the first channel is located”, as required by claim 1. Rather, Keronen only discloses transmitting service provider information and service information via the mobile network.

Accordingly, for the foregoing reasons, the combination of Bender and Keronen fails to teach or suggest the invention of claim 1.

Claims 6, 12 and 14 contain limitations similar to those found in claim 1, and thus, are allowable for at least the same reasons. In addition, neither Bender nor Keronen teach or suggest “transmitting pointer data on each of the plurality of channels, wherein the pointer data identifies a channel containing a plurality of service announcements identifying the service

transmitted on each of the plurality of channels”, and thus, are allowable for at least this additional reason.

New Claims:

Applicant has added new claims 49 and 50, which depend from claim 15 and further define the first period of time recited in claim 15 as being “specified by a user of the mobile terminal” and “established in the mobile terminal at a time of manufacture”, respectively. Applicant respectfully submits that these features are neither taught nor suggested by the prior art of record.

Dependent Claims:

Applicant does not believe it necessary at this time to further address the rejections of the dependent claims as Applicant believes that the foregoing arguments and amendments place the independent claims in condition for allowance. Applicant, however, reserves the right to address those rejections in the future should such a response be deemed necessary and appropriate.

For the above-stated reasons, this application is respectfully asserted to be in condition for allowance, and an early and favorable examination on the merits is respectfully requested.

AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required by this response, or credit any overpayment to Deposit Account No. 13-4500, Order No. 4208-4061. A DUPLICATE COPY OF THIS PAPER IS ATTACHED.

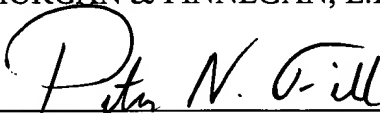
In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to

grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. 13-4500, Order No. 4208-4061. A DUPLICATE COPY OF THIS PAPER IS ATTACHED.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

Dated: December 8, 2003

By: _____



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